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## Safety Precautions

*The following safety precautions must be taken when using your air conditioner.*



### WARNING

- **Risk of electric shock can cause injury or death. • Disconnect all remote electric power supplies before servicing, installing or cleaning.**
- **Installation must be done by the manufacturer or service agent or a similar qualified person in order to avoid a hazard.**

#### INSTALLING THE UNIT

- ◆ The unit should not be installed by the user. Ask the dealer or authorized company to install the units.
- ◆ If the unit is installed improperly, water leakage, electric shock or fire may result.
- ◆ Mount with the lowest moving parts at least 2.5m above the floor or grade level. (If applicable)
- ◆ The manufacturer does not assume responsibility for accidents or injury caused by an incorrectly installed air conditioner. If you are unsure about installation, contact an installation specialist.
- ◆ When installing the built-in type air conditioner, keep all electrical cables such as the power cable and the connection cord in pipe, ducts, cable channels e.t.c to protect them against liquids, outside impacts and so on.
- ◆ This appliance is not accessible to the general public. This appliance should be installed according to the provided installation instruction.
- ◆ When installing the air conditioner in a small room, the measure not to exceed the dangerous density is needed.
  - When refrigerant leaks and exceeds the dangerous density, suffocation may occur.
- ◆ If any gas or impurities except R410A refrigerant come into the refrigerant pipe, serious problem may occur and it may cause injury.
- ◆ Use only rated accessories and install the air conditioner with rated equipments.
  - If you don't use the rated accessories, the air conditioner may drop from its place, water may leak or electric shock or fire may occur.
- ◆ Ventilate your room when refrigerant gas leaks during installation.
  - Toxic gas may generate when refrigerant gas contacts with heat.

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### POWER SUPPLY LINE OR CIRCUIT BREAKER

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- ◆ If the power cable of this air conditioner is damaged, it must be replaced by service agent or similarly qualified persons in order to avoid a hazard.
- ◆ The unit must be plugged into an independent circuit if applicable or connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixed wiring with a contact opening of >3mm.
- ◆ The air conditioner must be installed in accordance with national wiring regulations and safety regulations wherever applicable.
- ◆ The electric work must be done by service agent or similarly qualified persons according to national wiring regulations and use only rated cable.
  - If the capacity of the power cable is insufficient or electric work is not properly completed, electric shock or fire may occur.
- ◆ Install the cables with supplied cables firmly. Fix them securely so that external force is not exerted to the terminal board.
  - If the connection or fixing is incomplete, heat generation, electric shock or fire may occur.
- ◆ Connect the power cable between the indoor and outdoor unit properly so that the electrical component box cover is not get loosen and attach the cover securely.
  - If the the cover is attached incompletely, heat generation, electric shock or fire of the terminal board may occur.

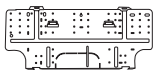
#### **CAUTION**

- ◆ **Make sure that you earth the cables.**
  - **Do not connect the earth wire to the gas pipe, water pipe, lighting rod or telephone wire. If earthing is not complete, electric shock or fire may occur.**
- ◆ **Install the circuit breaker.**
  - **If the circuit breaker is not installed, electric shock or fire may occur.**
- ◆ **Make sure that the condensed water dripping from the drain hose runs out properly and safely.**
- ◆ **Install the power cable and communication cable of the indoor and outdoor unit at least 1m away from the electric appliance.**
- ◆ **Install the indoor unit away from lighting apparatus using the ballast.**
  - **If you use the wireless remote control, reception error may occur due to the ballast of the lighting apparatus.**
- ◆ **Do not install the air conditioner in following places.**
  - **Place where there is mineral oil or arsenic acid.**  
**Resin parts flame and the accessories may drop or water may leak.**  
**The capacity of the heat exchanger may reduce or the air conditioner may be out of order.**
  - **The place where corrosive gas such as sulfurous acid gas generates from the vent pipe or air outlet.**  
**The copper pipe or connection pipe may corrode and refrigerant may leak.**
  - **The place where there is a machine that generates electromagnetic waves.**  
**The air conditioner may not operate normally due to control system.**
  - **The place where there is a danger of existing combustible gas, carbon fiber or flammable dust.**  
**The place where thinner or gasoline is handled.**  
**Gas may leak and it may cause fire.**
- ◆ **Our units must be installed in compliance with the spaces indicated in the installation manual to ensure either accessibility from both sides or ability to perform routine maintenance and repairs. The units' components must be accessible and that can be disassembled in conditions of complete safety either for people or things.**

## Accessories

***The following accessories are supplied with the indoor unit.  
The type and quantity may differ depending on the specifications.***

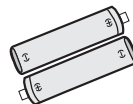
Installation Plate



Remote Control



Batteries for Remote Control



User's Manual



Installation Manual



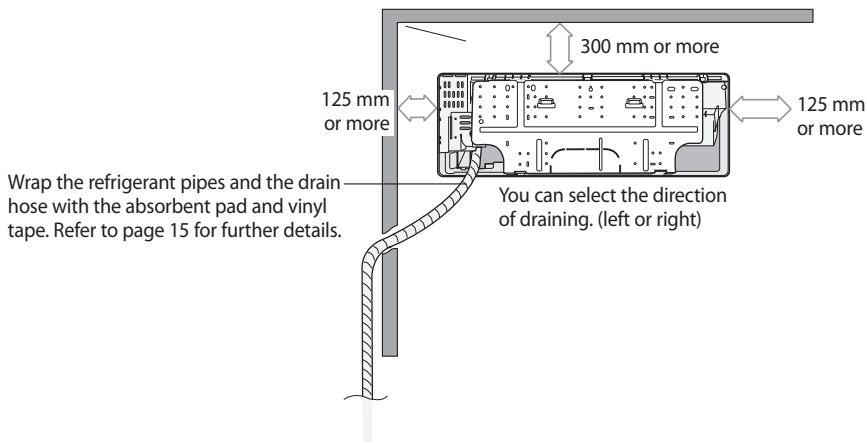
## Selecting the Installation Location

### Indoor Unit

- ◆ Select a convenient location that permits the air to reach every corner of the area to be cooled.
- ◆ Pre-plan for easy and short routing of the refrigerant tubing and wiring to the outdoor unit.
- ◆ There should be no flammable gas, alkaline, substances present in the air.
- ◆ Avoid location where obstacles preventing good air circulation are present.
- ◆ Noise prevention should be considered in determining the unit's location.
- ◆ The structure, where the unit is to be installed should be strong enough to support the weight of the unit.
- ◆ Rigid wall without vibration.
- ◆ Where it is not exposed to direct sunshine.
- ◆ Where the air filter can be removed and cleaned easily.

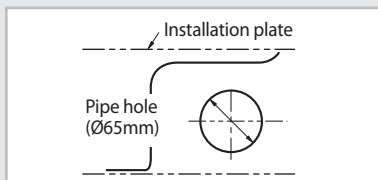
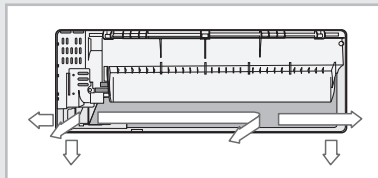
### Space Requirements for Indoor Unit

**Observe the clearances and maximum lengths as seen in the picture below when installing the air conditioner.**

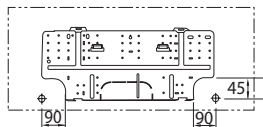


※ The appearance of the unit may be different from the diagram depending on the model.

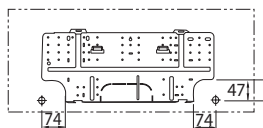
## Fixing the Installation Plate



(Unit : mm) \*\*022/028/036\*\*



(Unit : mm) \*\*056/071\*\*



**Before fixing the installation plate to the wall or window frame, you must determine the position of the 65mm hole through which the cable, pipe and hose pass to connect the indoor unit to the outdoor unit.**

**When facing the wall, the pipe and cable can be connected from the:**

- ◆ Right
- ◆ Left
- ◆ Underside (right)
- ◆ Rear (right or left)

- 1 Determine the position of the pipe and drain hose hole as seen in the picture and drill the hole with an inner diameter of 65mm so that it slants slightly downwards.

### 2 If you fix the indoor unit to a... Follow step(s)...

Wall	3.
Window frame	4 to 6.

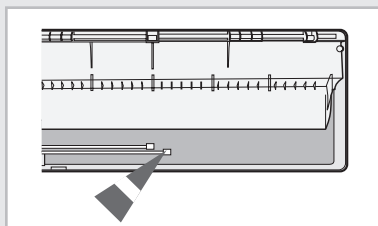
- 3 Fix the installation plate to the wall giving attention to the weight of the indoor unit.
  - If you mount the plate to a concrete wall with anchor bolts, the anchor bolts must not project more than 20mm.
- 4 Determine the positions of the wooden uprights to be attached to the window frame.
- 5 Attach the wooden uprights to the window frame giving attention to the weight of the indoor unit.
- 6 Attach the installation plate to the wooden uprights using tapping screws as seen in the picture.

## Purging the Unit

**On delivery, the indoor unit is loaded with an inert Nitrogen gas. All this gas must therefore be purged before connecting the assembly piping. To purge the inert gas, proceed as follows.**

- 1 Unscrew the caps at the end of each pipe.  
**Result:** All inert gas escapes from the indoor unit.

**Note** To prevent dirt or foreign objects from getting into the pipes during installation, do NOT remove the caps completely until you are ready to connect the piping.

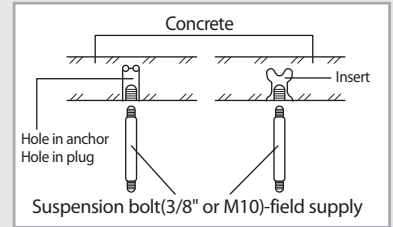




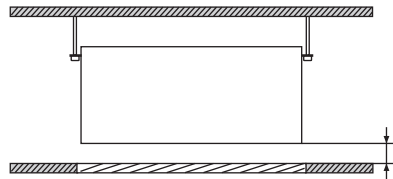
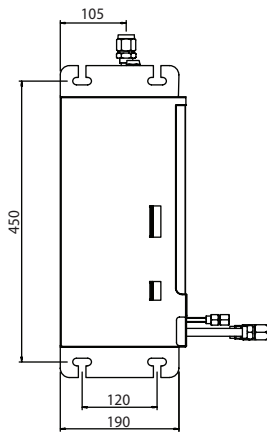
# EEV Kit Installation

## Preparing for Installation

- 1 Check dimension and installation location.
- 2 Check installation place.
  - ◆ By using a pattern sheet, check required installation space.

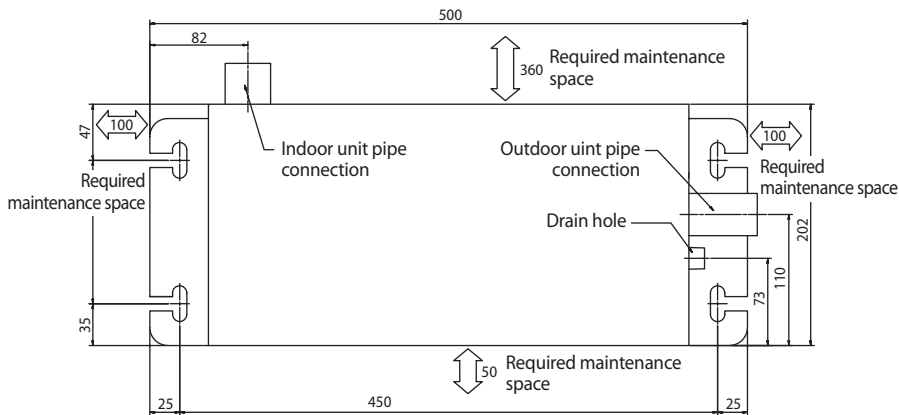
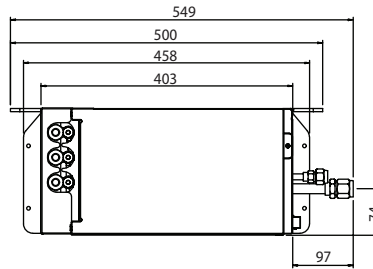
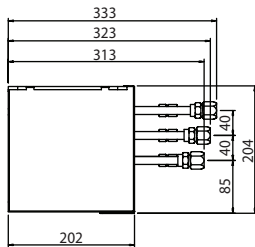


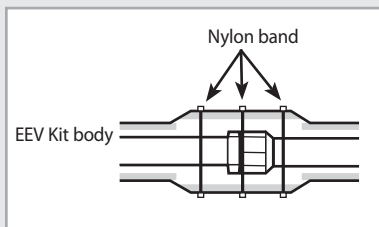
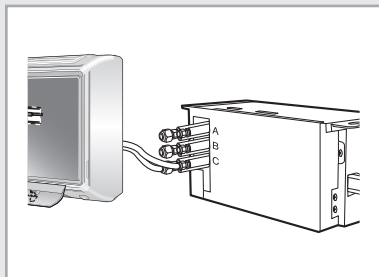
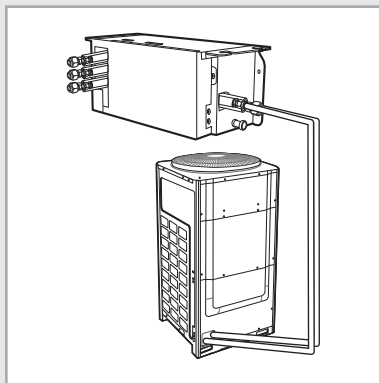
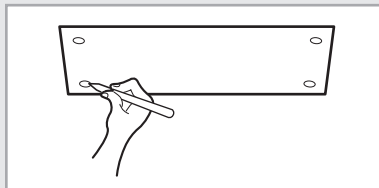
Unit : mm



□ 450mm X 200mm or more  
(Maintenance Hole)

✱ Maintenance hole must be located on the ceiling.





### Connection of refrigerant piping & Insulation

- 1 Insert bot anchors, use existing ceiling supports or construct a suitable support.

#### CAUTION

Ensure the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.

- 2 Connect the "IN" refrigerant pipe to the outdoor unit.

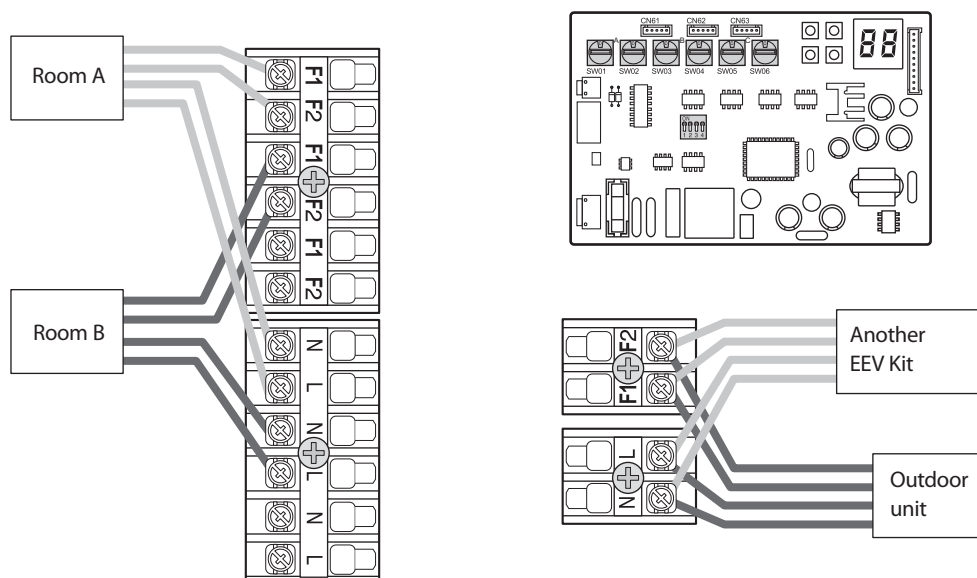
- 3 Connect the "OUT" refrigerant pipe to each indoor unit(A, B and C).

◆ The liquid and gas pipes should not be crossed when piping connection.

- 4 Insulate the connection piping. A joint part of pipe needs double thickness of insulation.

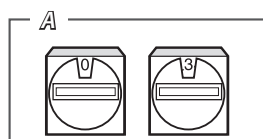
- 5 The EEV kit has to be installed that the user has no access to it. (built-in type)

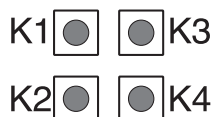
## Wiring & Assigning address



- 1 Connect the AC power cable and communication cable from the outdoor unit to terminal, then connect the cable to another EEV kit.
- 2 Connect the AC power cable and communication cable to each indoor unit (A, B and C).
- 3 EEV kit address should be set same with connected indoor units main address.

**For Example** When Main address is set as "03" that connected in pipe "A", the EEV kit "A" address should be set as "03".





### Function of Display

- ◆ The numbers which are displayed on left are the status of indoor unit checking status through communication with same outdoor unit.  
(If it indicates 1, 3 and 7, that means the ADDRESS of indoor unit is set to 1, 3 and 7.)
- ◆ The numbers which are displayed on right indicate the ADDRESS of SW01/SW02, SW03/SW04 and SW05/SW06 in sequential. (If it indicates 0, 1 and 2, that means the SW01/SW02 is set to 0, the SW03/SW04 is set to 1, and the SW05/SW06 is set to 2.)
- ◆ If the communication error occurs in EEV Kit, the Er↔C0 message will be shown on the display alternatively.

### KEY function

- ◆ If you press a KEY on the PCB, the display will show you a step of appropriate EEV Kit.

KEY No.	Meaning	Example
K1	Step of EEV Kit A	19 (19 x 10 = 190 STEP)
K2	Step of EEV Kit B	
K3	Step of EEV Kit C	
K4	-	-

### Test run

- ◆ Each indoor unit runs separately to check pipe connection and address setting.

#### CAUTION

***If all units run at the same time, pipe cross connection and address mismatching cannot be found.***

## Connecting the Refrigerant Pipe

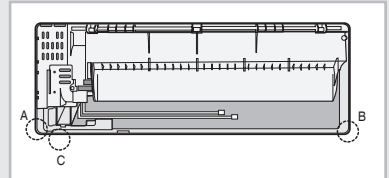
There are 2 refrigerant pipes of different diameters:

- ◆ The smaller one is for the liquid refrigerant
- ◆ The larger one is for the gas refrigerant

A short pipe is already fitted to the air conditioner. You may need to extend the pipe using the assembly pipe. (optional)

The connection procedure for the refrigerant pipe varies according to the exit position of the pipe when facing the wall:

- ◆ Right (A)
- ◆ Left (B)
- ◆ Underside (C)
- ◆ Rear



1 Cut out the appropriate knock-out piece on the rear of the indoor unit unless you connect the pipe directly from the rear.

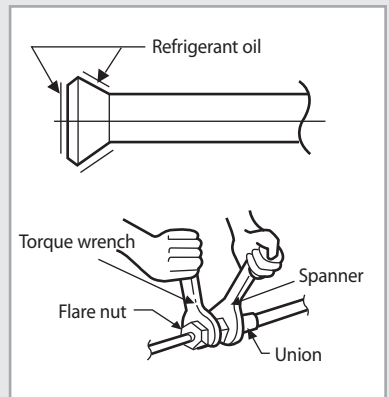
2 Smooth the cut edges.

3 Remove the protection caps of the pipes and connect the assembly pipe to each pipe. Tighten the nuts first with your hands, and then with a torque wrench, applying the following torque:

Outer Diameter	Torque (kgf-cm)
6.35 mm (1/4")	145~175
9.52 mm (3/8")	333~407
12.70 mm (1/2")	505~615
15.88 mm (5/8")	630~769

➤ If you want to shorten or extend pipes, refer to page 14.

**Note** Must apply refrigerant oil on the flaring area to prevent a leak.



4 Cut off the remaining foam insulation.

5 If necessary, bend the pipe to fit along the bottom of the indoor unit. Then pull it out through the appropriate hole.

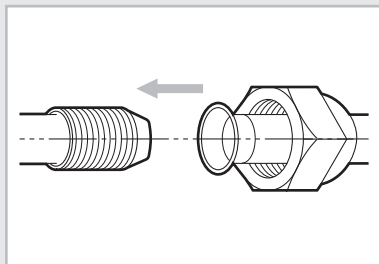
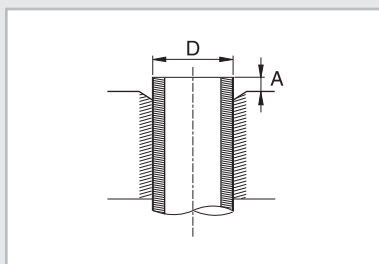
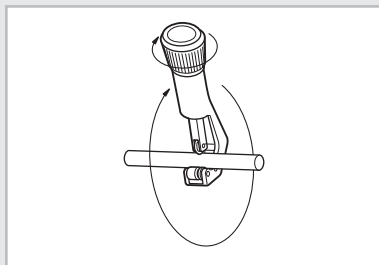
- ◆ The pipe should not project from the rear of the indoor unit.
- ◆ The bending radius should be 100 mm or more.

6 Pass the pipe through the hole in the wall.

7 For further details on how to connect to the outdoor unit and purge the air, refer to page 8.

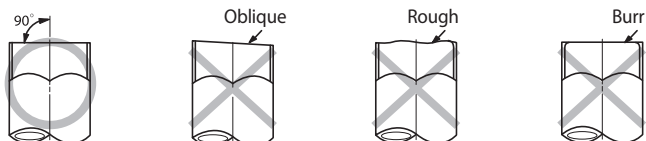
➤ **The pipe will be insulated and fixed permanently into position after finishing the installation and the gas leak test; refer to page 15 for further details.**

## Cutting / Flaring the Pipes



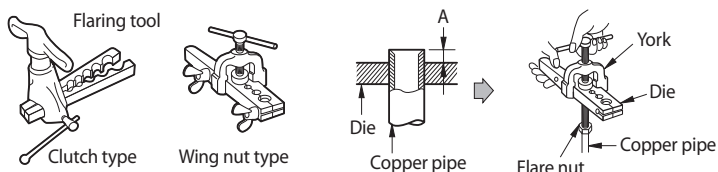
1 Make sure that you prepared the required tools.  
(pipe cutter, reamer, flaring tool and pipe holder)

2 If you want to shorten the pipe, cut it using a pipe cutter ensuring that the cut edge remains at 90° with the side of the pipe. There are some examples of correctly and incorrectly cut edges below.



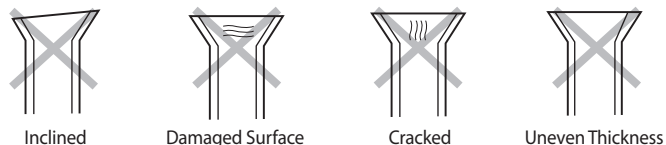
3 To prevent a gas leak, remove all burrs at the cut edge of the pipe using a reamer.

4 Carry out flaring work using flaring tool as shown below.



Outer diameter (mm)	A(mm)		
	Flare tool for R410A clutch type	Conventional flare tool	
		Clutch type	Wing nut type
6.35	0~0.5	1.0~1.5	1.5~2.0
9.52	0~0.5	1.0~1.5	1.5~2.0
12.70	0~0.5	1.0~1.5	1.5~2.0
15.88	0~0.5	1.0~1.5	1.5~2.0

5 Check if you flared the pipe correctly. There are some examples of incorrectly flared pipes below.



6 Align the pipes and tighten the flare nuts first manually and then with a torque wrench, applying the following torque.

Outer diameter (mm)	Connection Torque (kgf·cm)	Flare dimension (mm)	Flare shape (mm)
6.35	145~175	8.70~9.10	
9.52	333~407	12.80~13.20	
12.70	505~615	16.20~16.60	
15.88	630~769	19.30~19.70	

### CAUTION

**In case of needing brazing, you must work with Nitrogen gas blowing.**

## Performing Leak Test & Insulation

### Leak test

#### **LEAK TEST WITH NITROGEN (before opening valves)**

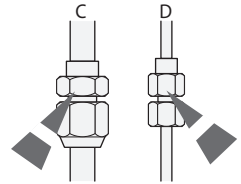
In order to detect basic refrigerant leaks, before recreating the vacuum and recirculating the R410A, it's responsible of installer to pressurize the whole system with nitrogen (using a pressure regulator) at a pressure above 4.1MPa (gauge).

#### **LEAK TEST WITH R410A (after opening valves)**

Before opening valves, discharge all the nitrogen into the system and create vacuum. After opening valves check leaks using a leak detector for refrigerant R410A.

#### **CAUTION**

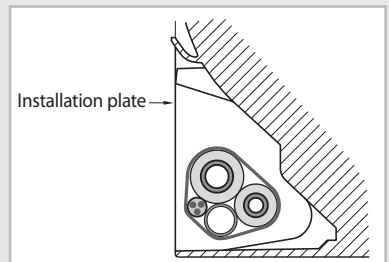
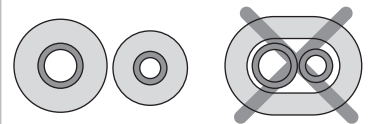
**Discharge all the nitrogen to create a vacuum and charge the system.**



### Insulation

**After checking for gas leaks in the system, insulate the pipe, hose and cables. Then place the indoor unit on the installation plate.**

- 1 To avoid condensation problems, place heat-resistant polyethylene foam separately around each refrigerant pipe in the lower part of the indoor unit.
- 2 Wrap the refrigerant pipe and the drain hose in the rear of the indoor unit with the absorbent pad.
  - Wind the pipe and hose three times to the end of the indoor unit with the absorbent pad. (20 mm interval)
- 3 Wind the pipe, assembly cable and drain hose with insulation tape.
- 4 Place the bundle (the pipe, assembly cable and drain hose) in the lower part of the indoor unit carefully so it doesn't project from the rear of the indoor unit.
- 5 Hook the indoor unit to the installation plate and move the unit to the right and left until it is securely in place.
- 6 Wrap the rest of the pipe with vinyl tape.
- 7 Attach the pipe to the wall using clamps (optional).

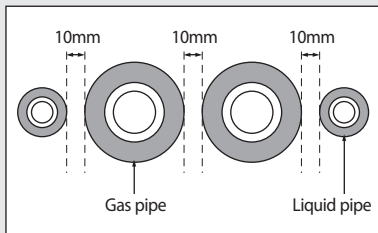
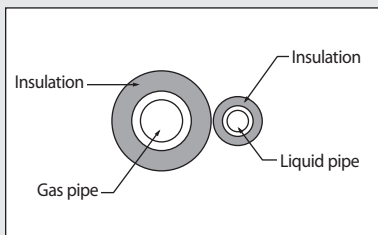


## Performing Leak Test & Insulation (Continued)

### 8 Select the insulator of the refrigerant pipe.

- ◆ Insulate the gas side and liquid side pipe referring to the thickness according to the pipe size.
- ◆ The thickness according to the pipe size is a standard of the indoor temperature of 27°C and humidity of 80%.  
If installing in an unfavorable conditions, use thicker one.
- ◆ Insulator's heat-resistance temperature should be more than 120°C.

Pipe size (mm)	Minimum thickness of insulator (mm)		Remarks
	PE foam	EPDM foam	
Ø6.35~Ø15.88	13	10	If you install the pipe underground, at the seaside, a spa or on the lake, use 1 grade thicker one according to the pipe size.
-	25	19	



### Refrigerant pipe before EEV kit and MCU or without EEV kit and MCU

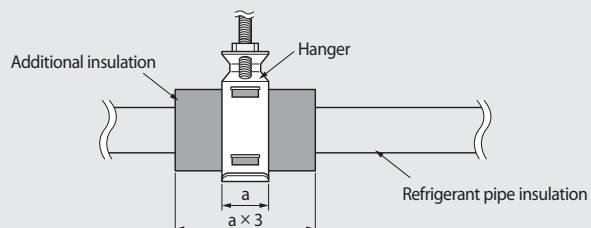
- ◆ You can contact the gas side and liquid side pipes but the pipes should not be pressed.
- ◆ When contacting the gas side and gas side pipe, use 1 grade thicker insulator.

### Refrigerant pipe after EEV kit and MCU

- ◆ Install the gas side and liquid side pipes, leave 10mm of space.
- ◆ When contacting the gas side and liquid side pipe, use 1 grade thicker insulator.

### CAUTION

- ◆ **Install the insulation not to get wider and use the adhesives on the connection part of it to prevent moisture from entering.**
- ◆ **Wind the refrigerant pipe with insulation tape if it is exposed to outside sunlight.**
- ◆ **Install the refrigerant pipe respecting that the insulation does not get thinner on the bent part or hanger of pipe.**
- ◆ **Add the additional insulation if the insulation plate gets thinner.**

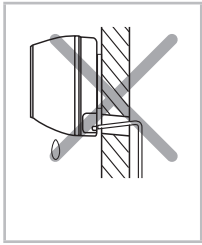




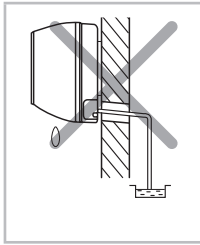
## Installing and Connecting the Drain Hose of the Indoor Unit

**When installing the drain hose for the indoor unit, check if condensation draining is adequate.**

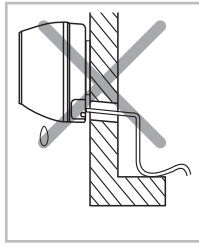
**When passing the drain hose through the 65-mm hole drilled in the wall, check the following:**



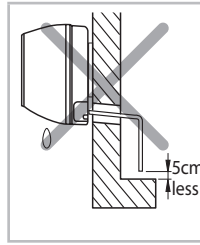
The hose must NOT slant upwards.



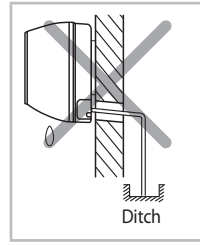
The end of the drain hose must NOT be placed under water.



Do NOT bend the hose in different directions.



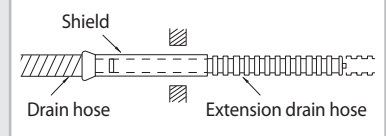
Keep a clearance of at least 5cm between the end of the hose and the ground.



Do NOT place the end of the drain hose in a hollow.

### Drain hose installation:

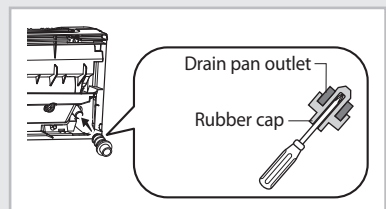
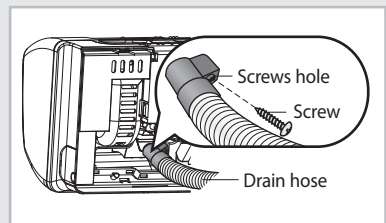
- 1 If necessary, connect the 2-meter extension drain hose to the drain hose.
  - 2 If you use the extension drain hose, insulate the inside of the extension drain hose with a shield.
  - 3 Fit the drain hose into 1 of 2 drain hose holes, then fix the end of the drain hose tightly with a clamp.  
➤ If you don't use the other drain hose hole, block it with a rubber stopper.
  - 4 Pass the drain hose under the refrigerant pipe, keeping the drain hose tight.
  - 5 Pass the drain hose through the hole in the wall. Check if it slants downwards as seen in the picture.
- **The hose will be fixed permanently into position after finishing the installation and the gas leak test; refer to page 15 for further details.**



## Changing Direction of the Drain Hose

**You can select the direction of the drain hose, depending on where you want to install the indoor unit.**

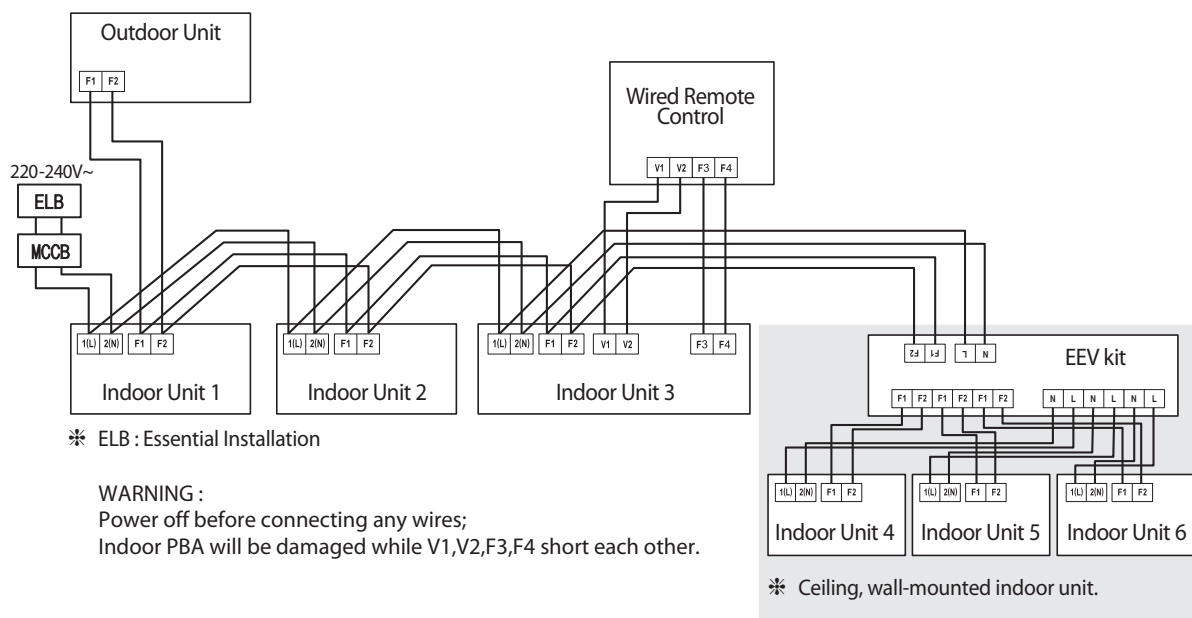
- 1 Detach the rubber cap with the flyer.
- 2 Detach the drain hose by pulling it and turning to the left.
- 3 Insert the drain hose by fixing it into the groove of the drain hose and the outlet of the drain pan.
- 4 Attach the rubber cap with a screwdriver by turning it to the right until it fixes to the end of the groove.



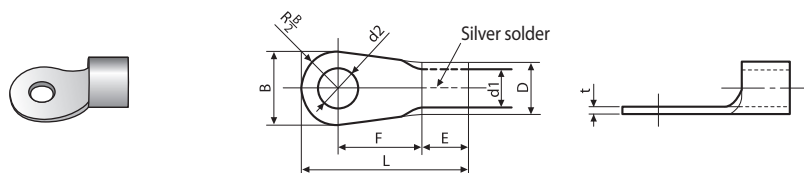
- **One of the diagrams has an illustration with the words "Screws hole" that should be changed to "Screw hole."**

## Power and communication cable connection

- 1 Before wiring work, you must turn off all power source.
- 2 Indoor unit power should be supplied through the breaker(MCCB, ELB) separated by the outdoor power.
- 3 The power cable should be used only copper wires.
- 4 Connect the power cable{1(L), 2(N)} among the units within maximum length and communication cable(F1, F2) each.
- 5 Connect V1, V2(for DC12V) and F3, F4(for communication) when installing the wired remote control.



## Selecting compressed ring terminal



Nominal dimensions for cable (mm <sup>2</sup> )	Nominal dimensions for screw (mm)	B		D		d1		E	F	L	d2		t
		Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Min.	Min.	Max.	Standard dimension (mm)	Allowance (mm)	Min.
1.5	4	6.6	±0.2	3.4	+0.3 -0.2	1.7	±0.2	4.1	6	16	4.3	+0.2 0	0.7
	4	8											
2.5	4	6.6	±0.2	4.2	+0.3 -0.2	2.3	±0.2	6	6	17.5	4.3	+0.2 0	0.8
	4	8.5											
4	4	9.5	±0.2	5.6	+0.3 -0.2	3.4	±0.2	6	5	20	4.3	+0.2 0	0.9

## Specification of electronic wire

Power supply	MCCB	ELB or ELCB	Power cable	Earth cable	Communication cable
Max : 242V Min : 198V	X A	X A, 30mmA 0.1 sec	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	0.75~1.5mm <sup>2</sup>

- ◆ Decide the capacity of ELCB(or MCCB+ELB) by below formula.

$$\text{The capacity of ELCB(or MCCB+ELB) X [A]} = 1.25 \times 1.1 \times \sum A_i$$

- \* X : The capacity of ELCB(or MCCB+ELB).
- \*  $\sum A_i$  : Sum of Rating currents of each indoor unit.
- \* Refer to each installation manual about the rating current of indoor unit.

### \* Rating current

Unit	Model	Rating current
AVXWV**	**022**	0.13A
	**028**	0.18A
	**036**	0.19A
	**056**	0.30A
	**071**	0.30A
NH*VH*	**022**	0.13A
	**028**	0.18A
	**036**	0.19A
	**056**	0.30A
	**071**	0.30A

- ◆ Decide the power cable specification and maximum length within 10% power drop among indoor units.

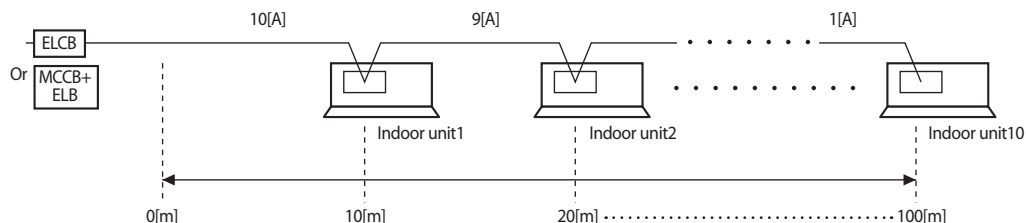
$$\sum_{k=1}^n \left( \frac{\text{Coef} \times 35.6 \times L_k \times i_k}{1000 \times A_k} \right) < 10\% \text{ of input voltage [V]}$$

\* coef: 1.55

\*  $L_k$ : Distance among each indoor unit [m],  $A_k$ : Power cable specification [mm<sup>2</sup>]  
 $i_k$ : Running current of each unit [A]

### Example of Installation

- Total power cable length L = 100(m), Running current of each units 1[A]
- Total 10 indoor units were installed

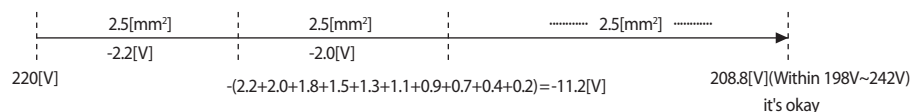


- ◆ Apply following equation.

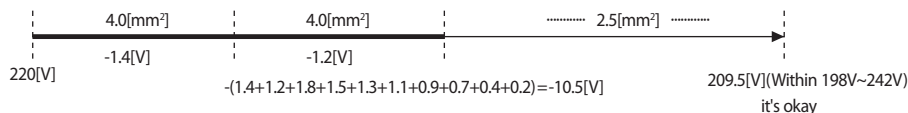
$$\sum_{k=1}^n \left( \frac{\text{Coef} \times 35.6 \times L_k \times i_k}{1000 \times A_k} \right) < 10\% \text{ of input voltage [V]}$$

### \* Calculation

- ◆ Installing with 1 sort wire.



- ◆ Installing with 2 different sort wire.



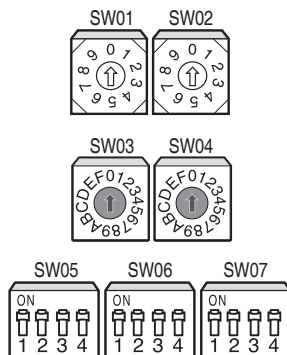
### CAUTION

- ◆ **Select the power cable in accordance with relevant local and national regulations.**
- ◆ **Wire size must comply with local and national code.**
- ◆ **For the power cable, use the grade of H07RN-F or H05RN-F materials.**
- ◆ **You should connect the power cable into the power cable terminal and fasten it with a clamp.**
- ◆ **The unbalanced power must be maintained within 10% of supply rating among whole indoor units.**
- ◆ **If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 10% of supply rating, the indoor unit is protected, stopped and the error mode indicates.**
- ◆ **To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units in the iron pipe.**
- ◆ **Connect the power cable to the auxiliary circuit breaker.**  
**An all pole disconnection from the power supply must be incorporated in the fixed wiring( $\geq 3\text{mm}$ ).**
- ◆ **You must keep the cable in a protection tube.**
- ◆ **Keep distances of 50mm or more between power cable and communication cable.**
- ◆ **Maximum length of power cables are decided within 10% of power drop. If it exceeds, you must consider another power supplying method.**
- ◆ **The circuit breaker(MCCB, ELB) should be considered more capacity if many indoor units are connected from one breaker.**
- ◆ **Use round pressure terminal for connections to the power terminal block.**
- ◆ **For wiring, use the designated power cable and connect it firmly, then secure to prevent outside pressure being exerted on the terminal board.**
- ◆ **Use an appropriate screwdriver for tightening the terminal screws.**  
**A screwdriver with a small head will strip the head and make proper tightening impossible.**
- ◆ **Over-tightening the terminal screws may break them.**
- ◆ **See the table below for tightening torque for the terminal screws.**

Tightening torque(kgf-cm)	
M 4	12.0~14.7

# Indoor Unit Setting

- 1 Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.
- 2 The address of the indoor unit is assigned by adjusting MAIN(SW01, SW02) and RMC(SW03, SW04) rotary switches.



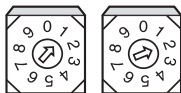
※ The designs and shape are subject to change according to the model.

## Setting Main Address

- ◆ The MAIN address is for communication between the indoor unit and the outdoor unit. Therefore, you must set it to operate the air conditioner properly.
- ◆ You can set the MAIN address from '00' to '99' by mixing SW01 and SW02. The MAIN address from '00' to '99' should differ from each other.
- ◆ Check the indoor unit address on the plan that you are to install and set the address according to the plan.

**Note** You may not need to set main address if you selected Auto Address Setting from the outdoor unit: see details on the outdoor unit installation manual.

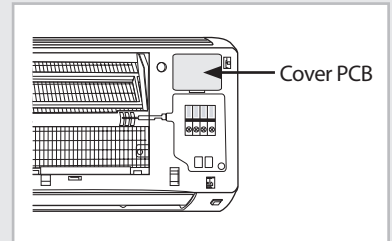
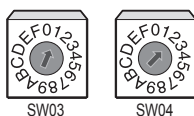
**For Example** When MAIN address is set as "12".



## Setting RMC Address

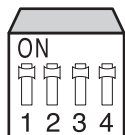
- ◆ The SW03, SW04 RMC switch is the address setting switch for controlling the indoor unit with the centralized controller.
- ◆ You must set the SW03, SW04 and K2 switch when using the centralized controller.

**For Example** When RMC address is set as "12".



## Additional Functions

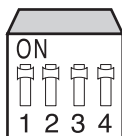
K1 K2 K3 K4



SW05

No.	Function	ON	OFF
SW05	K1	-	-
	K2	Centralized controller	Not use
	K3	-	-
	K4	-	-

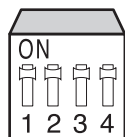
K5 K6 K7 K8



SW06

No.	Function	ON	OFF
SW06	K5	Heating Current Temperature Compensation	+ 2°C
	K6	Filter Time	1,000 hours
	K7	-	-
	K8	-	-

K9 K10 K11 K12





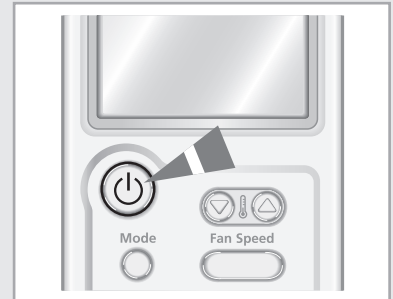
SW07

No.	Function	ON	OFF
SW07	K9	Indoor Expansion Valve For Heating Stop	Fix 80 step
	K10	Wired Remocon Group Master	Not use
	K11	External control	Not use
	K12	-	-

## Final Checks and User Tips

**To complete the installation, perform the following checks and tests to ensure that the air conditioner operates correctly.**

- 1 Check the following:
  - ◆ Strength of the installation site
  - ◆ Tightness of pipe connection to detect gas leak
  - ◆ Electric wiring connection
  - ◆ Heat-resistant insulation of the pipe
  - ◆ Drainage
  - ◆ Grounding conductor connection
  - ◆ Correct operation (follow the steps below)
- 2 Press the  button and check the following:
  - ◆ The indicator on the indoor unit lights up.
  - ◆ The airflow blade opens and the fan gears up for operation.
- 3 Press any button and check the following:
  - ◆ The appropriate indicator lights up and the air conditioner operates according to the selected mode or function.
- 4 Press the  button and check the following:
  - ◆ The airflow blades work properly.



**After finishing the installation of the air conditioner, explain the following to the user: (refer to appropriate pages in the User's Manual.)**

- 1 How to start and stop the air conditioner
- 2 How to select the modes and functions
- 3 How to adjust the temperature and fan speed
- 4 How to adjust the airflow direction
- 5 How to set the timers
- 6 How to clean and replace the filters

➤ **When you complete the installation successfully, hand over the User's Manual and this Installation Manual to the user for storage in a handy and safe place.**






## Troubleshooting

### Detection of errors

- ◆ If an error occurs during the operation, one or more LED flickers and the operation is stopped except the LED.
- ◆ If you re-operate the air conditioner, it operates normally at first, then detect an error again.

### LED Display on the indoor unit






#### LED Display

Abnormal conditions	Indicators					Remarks
						
Power reset	●	X	X	X	X	
Error of temperature sensor in indoor unit (OPEN/SHORT)	X	X	●	X	X	Displayed on appropriate indoor unit which is operating
Error of heat exchanger sensor in indoor unit Error of heat exchanger OUT sensor in indoor unit Error of outlet temperature sensor in indoor unit (OPEN/SHORT): For heat pump models only	●	X	●	X	X	Displayed on appropriate indoor unit which is operating
Error of indoor fan motor: Below 450RPM for 15 minutes	X	X	X	●	X	Displayed on appropriate indoor unit which is operating
Error of outdoor temperature sensor Error of COND sensor Error of DISCHARGE sensor	●	X	X	●	X	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
1. No communication for 2 minutes between indoor unit and outdoor unit (communication error for more than 2 minutes)  2. Indoor unit receiving the communication error from outdoor unit  3. Outdoor unit tracking 3 minute error  4. When sending the communication error from outdoor unit due to the mismatching of the communication numbers and installed numbers after completion of tracking (communication error for more than 2 minutes)	X	X	●	●	X	1. Error of indoor unit: Displayed on the indoor unit regardless of operation  2. Error of outdoor unit: Displayed on the indoor unit which is operating

● On ● Flickering X Off

- ◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- ◆ If you re-operate the air conditioner, it operates normally at first, then detects an error again.



Abnormal conditions	Indicators					Remarks
						
Self-diagnostic error (including the indoor unit not detected) 1. Error of electronic expansion valve close 2. Error of electronic expansion valve open 3. Breakaway of EVA OUT sensor 4. Breakaway of EVA IN sensor	X	X	●	●	●	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
5. Breakaway of COND MID sensor 6. 2nd detection of refrigerant completely leak 7. 2nd detection of high temperature COND 8. 2nd detection of high temperature DISCHARGE 9. COMP DOWN due to 2nd detection of low pressure switch 10. Error of reverse phase 11. Compressor down due to 6th detection of freezing 12. Self-diagnosis of condensation sensor (G8, G9) 13. Compressor down due to condensation ratio control	X	X	●	●	●	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
Error of float switch	X	X	X	●	●	
Error of setting option switches for optional accessories	X	X	●	X	●	
EEPROM error	●	X	●	●	X	
EEPROM option error	●	●	●	●	●	

● On ● Flickering X Off

- ◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- ◆ If you re-operate the air conditioner, it operates normally at first, then detects an error again.



"EEE Yönetmeliğine Uygundur"  
"This EEE is compliant with RoHS"

**SAMSUNG**

# INSTALLATION MANUAL

**Wall-mounted Type Series**

**Vivace Type : AVXWV\*\***

**NH\*\*\*VH\*\*\***

**Air Conditioner**

